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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/610,948	06/30/2003	J. Kenneth Coppola	YOR920030131US1	4139

7590 09/19/2005

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EXAMINER

MASINICK, MICHAEL D

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/610,948

Applicant(s)

COPPOLA ET AL.

Examiner

Michael D. Masinick

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/5/2005
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's arguments filed 7/11/2005, with respect to the rejection(s) of claim(s) 1-18 under USC 102 have been fully considered and are persuasive in view of the amendments presented. Therefore, the rejection has been withdrawn. A new ground(s) of rejection is made below in view of amendments.

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 7/5/2005 was in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner. However, all art cited was previously cited by the examiner and has been struck so as to not cause printing confusion upon allowance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,630,070 to Dietrich et al in view of U.S. Patent No. 5,239,487 to Horejsi et al.

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4. Referring to claims 1 and 8, Dietrich shows a method and storage medium for integrating rework operations into a planning process comprising: providing at least one Bill of Materials flow for use in conjunction with other Bills of Materials flow in a production planning process (Figure 10, label 3 and Column 31), the at least one Bill of Materials flow using inventory balance equations that describe a flow of Bill of Materials between inventory holding points (Column 21, line 22); forecasting rework parametric information associated with said at least one Bill of Materials flow (Column 1, lines 22-39); said rework parametric information including at least one of: yields (Column 24, line 22); cycle times (Column 1, lines 22-39); and materials (Column 1, lines 22-39) applying the parametric information to the at least one Bill of Materials flow resulting in a manufacturing plan for operations; and generating an integrated manufacturing plan that includes the manufacturing plan for operations and the other Bill of Materials flow (Column 4, lines 1-15).

5. Dietrich does not specifically show the inclusion of rework operations in the manufacturing plan and optimization resource planning engine.

6. Rework operations and the problems inherent with known (in 1993) manufacturing and plant monitoring systems are discussed in the Horejsi patent in depth in column 1, from lines 37 – column 2, line 62. Horejsi proposes a way of reintegrating rework materials and necessary rework operations into the flow of process planning (abstract).

7. As the Dietrich patent shows all necessary functions of the claimed system and only fails to show the type of work being done, it would have been obvious to one of ordinary skill at the time of the invention to use the concepts of manufacturing rework set forth in Horejsi to reintegrate the rework operations into the system of Dietrich because “rework is generally a

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manual process” and because it reduces the time required for rework operations, reduces the cost associated with rework operations, and reduces the level of necessary skill in order to perform rework operations (Column three, top).

8. Referring to claim 15, Dietrich shows all claim elements not shown above with relation to claims 1 and 8. These elements are, an advanced planning system (Figure 9, “optimal resource allocation procedure”), an enterprise resource planning system (Figure “planning systems”), and a rework system (brought in through Horejsi above), and a technical depository in communication with said server (Figure 10, #1-6).

9. Referring to claim 2, 9, and 16, Dietrich in view of Horejsi shows balancing capacity constraints for said at least one rework Bill of Materials with capacity constraints for said other Bills of Materials flow (Dietrich - “capacity requirements planning (CRP) software” – Column 2, lines 11-23).

10. Referring to claim 3, 10, and 17, Horejsi shows executing said integrated manufacturing plan wherein said rework parametric information for materials not consumed during execution but determined to be reworkable are fed back into a second rework Bill of Materials flow operable for being consumed in a new integrated manufacturing plan (Abstract of Horejsi).

11. Referring to claims 4-6 and 11-13, Dietrich in view of Horejsi shows a percentage of product determined to have successfully passed testing (Horejsi, Column 4, lines 1-19), an

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amount of time required to rework a product including wait time (This is the common definition of cycle time as known in the industry), rework materials define materials created during a rework process (abstract of Horejsi).

12. Referring to claims 7, 14, and 18, Dietrich shows wherein said integrated manufacturing plan is executed via a linear programming application (Column 1, line 41).

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

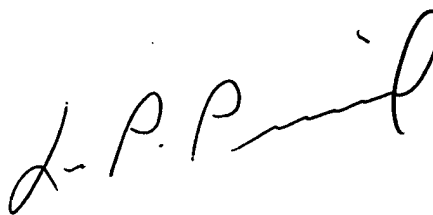
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael D. Masinick whose telephone number is (571) 272-3746. The examiner can normally be reached on Mon-Fri, 7:30-4:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MDM, September 6, 2005

A handwritten signature in black ink, appearing to read 'L. P. Picard', with a stylized flourish at the end.

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100